

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims:

1. (Previously Presented) A rotary encoder comprising:

a disc that rotates around a rotating axis and comprises slits that are formed circumferentially at given intervals;

a pair of photo-interrupters that respectively have a light-emitting device and a photo-detecting device opposite each other, and that generates two signals with a phase difference, each photo-interrupter being pivotable around a pivot coaxial to the rotating axis, and each photo-interrupter being arranged along the circumferential direction of said disc so as to position the slits between the light-emitting device and the photo-detector;

an adjusting member configured to contact said pair of photo-interrupters, and configured to be movable along a shifting direction corresponding to a radial direction of said disc so as to engage said pair of photo-interrupters, said adjusting member configured to adjust a relative position-relationship between the pair of photo-interrupters associated with the phase difference; and

a shifting controller configured to shift said adjusting member along the shifting direction to set the phase difference to a predetermined phase difference.

2. (Previously Presented) The rotary encoder of claim 1, wherein said adjusting member is movable between said pair of photo-interrupters, said pair of photo-

interrupters being separated from each other in accordance with the engaging of said adjusting member.

3. (Original) The rotary encoder of claim 2, wherein said pair of photo-interrupters is arranged so as to be symmetrical with respect to the shifting direction, such that each photo-interrupter pivots by an equal shifting-amount.

4. (Original) The rotary encoder of claim 1, further comprising a supporting member that supports said pair of photo-interrupters and said adjusting member, said adjusting member being slidable on said supporting member along the shifting direction, and said pair of photo-interrupters being pivotably mounted on said supporting member.

5. (Previously Presented) The rotary encoder of claim 4, wherein said shifting controller comprises a screw, said screw being threaded into a first threaded hole formed in said supporting member and a second threaded hole formed in said adjusting member, said adjusting member being movable by screwing said shifting controller.

6. (Original) The rotary encoder of claim 5, wherein a screw-direction of said second threaded hole is opposite of that of said first threaded hole, said screw comprising a first screw section with a screw direction corresponding to said first threaded hole and a second screw section with a screw direction corresponding to said second threaded hole.

7. (Previously Presented) The rotary encoder of claim 1, wherein each of said pair of photo-interrupters is fastened around the pivot such that each photo-interrupter moves only when said adjusting member engages therewith.

8. (Previously Presented) The rotary encoder of claim 1, wherein said adjusting member comprises a curved surface portion such that said pair of photo-interrupters is engaged simultaneously.

9. (Previously Presented) A position adjuster for a pair of photo-interrupters incorporated in a rotary encoder having a disc that rotates around a rotating axis and includes slits, said position adjuster comprising:

an adjusting member configured to contact said pair of photo-interrupters, and configured to be movable along a shifting direction corresponding to a radial direction of said disc so as to engage said pair of photo-interrupters, said adjusting member configured to adjust a relative position-relationship between the pair of photo-interrupters associated with a phase difference; and

a shifting controller configured to shift said adjusting member along the shifting direction to set the phase difference to a predetermined phase difference.

10. (Previously Presented) The position adjuster of claim 9, wherein said adjusting member is movable between said pair of photo-interrupters, said pair of photo-interrupters being separated from each other in accordance with the engaging of said adjusting member.

11. (Original) The position adjuster of claim 10, wherein said pair of photo-interrupters is arranged so as to be symmetrical with respect to the shifting direction, such that each photo-interrupter pivots by an equal shifting-amount.

12. (Original) The position adjuster of claim 9, further comprising a supporting member that supports said pair of photo-interrupters and said adjusting member, said

adjusting member being slidable on said supporting member along the shifting direction, and said pair of photo-interrupters being pivotably mounted on said supporting member.

13. (Previously Presented) The position adjuster of claim 12, wherein said shifting controller comprises a screw, said screw being threaded into a first threaded hole formed in said supporting member and a second threaded hole formed in said adjusting member, said adjusting member being movable by screwing said shifting controller.

14. (Original) The position adjuster of claim 13, wherein a screw-direction of said second threaded hole is opposite of that of said first threaded hole, said screw comprising a first screw section with a screw direction corresponding to said first threaded hole and a second screw section with a screw direction corresponding to said second threaded hole.

15. (Previously Presented) The position adjuster of claim 9, wherein each of said pair of photo-interrupters is fastened around the pivot such that each photo-interrupter moves only when said adjusting member engages therewith.

16. (Previously Presented) The position adjuster of claim 9, wherein said adjusting member comprises a curved surface portion such that said pair of photo-interrupters is engaged simultaneously.